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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,972	11/28/2000	Tomoko Yamaguchi	NAK1-BN18	6515
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SNELL & WILMER LLP 1920 MAIN STREET SUITE 1200 IRVINE, CA 92614-7230			DODDS, HAROLD E	
			ART UNIT	PAPER NUMBER
			2167	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/723,972

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Harold E. Dodds, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 31-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 November 2004 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 31, 32, 35, 36, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miike et al. (U.S. Patent No. 5,787,414) and Hisatomi et al. (U.S. Patent No. 6,546,192).

4. Miike renders obvious independent claims 31, 35, and 39 by the following:

“...a file storage unit operable to store a file that contains two pieces of data...” at col. 21, lines 53-56 and col. 22, lines 17-19.

“...each piece of data being video data...” at col. 22, 17-19 and col. 42, lines 54-57.

“...and containing a piece of numerical information...” at col. 64, lines 48-52.

“...a segment judging unit operable, for each file stored in the file storage unit...” at col. 68, lines 32-39, col. 21, lines 53-56, and col. 1, lines 53-36.

“...to read the two pieces of data...” at col. 38, lines 15-18 and col. 22, lines 17-19.

“...extract two pieces of numerical information...” at col. 22, lines 17-19 and col. 64, lines 48-52.

“...from the read two pieces of data...” at col. 38, lines 15-18 and col. 22, lines 17-19.

“...and judge whether...” at col. 68, lines 32-39.

“...are continuous in time series...” at col. 16, lines 21-28 and col. 72, lines 59-61.

“...and a segment generating unit operable...” at col. 68, lines 32-39 and col. 48, lines 54-58.

“...if the segment judging unit judges...” at col. 68, lines 32-39.

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"...to generate a segment..." at col. 48, lines 54-58 and col. 68, lines 32-39.

"...that contains the read two pieces of video data..." at col. 76, lines 50-56, col. 38, lines 15-18, col. 22, lines 17-19, and col. 42, lines 54-57.

Miike does not teach the use of time codes.

5. However, Hisatomi teaches the use of time codes as follows:

"...being a time code..." at col. 20, lines 49-54.

"...being time codes respectively..." at col. 20, lines 49-54.

"...the two time codes..." at col. 20, lines 49-54.

"...that the two time codes are continuous..." at col. 20, lines 49-54 and col. 8, lines 54-61.

It would have been obvious to one of ordinary skill at the time of the invention to combine Hisatomi with Miike to use time codes in order to designate the sequence of video segments in time order and reestablish this time order whenever the order of the segments is scrambled by transmission between systems. Miike and Hisatomi teach related applications. They teach the use of computers, the use of memory, the use of files, the use of segments, the storing of data, the searching for data, and the use of video. Miike provides file storage units, position information, the storage of segments, segment names, and video images and Hisatomi provides time codes.

6. As per claim 32, the "...a position information storage unit..." is taught by Miike at col. 21, lines 39-52, the "...position obtaining unit operable..." is taught by Miike at col. 13, lines 15-18,

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the "...if the segment judging unit judges...", is taught by Miike at col. 13, lines 15-28,

the "...that the two pieces of numerical information are continuous...", is taught by Miike at col. 22, lines 17-19, col. 64, lines 43-52, and col. 16, lines 21-28,

the "...to obtain two pieces of position information respectively...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

the "...of the two pieces of data from the file storage unit...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

the "...and a position information write unit operable to...", is taught by Miike at col. 21, lines 39-52 and col. 36, lines 61-65,

the "...recognizing the two pieces of data as the segment...", is taught by Miike at col. 61, lines 55-63, col. 22, lines 17-19, and col. 68, lines 32-39,

the "...generate a segment name...", is taught by Miike at col. 48, lines 54-58, col. 68, lines 32-39, and col. 61, lines 64-67,

the "...for identifying the recognized segment...", is taught by Miike at col. 13, lines 62-66, col. 61, lines 55-63, and col. 68, lines 32-39,

the "...and write into the position information storage unit...", is taught by Miike at col. 36, lines 61-65 and col. 21, lines 39-52,

the "...segment name...", is taught by Miike at col. 68, lines 32-39 and col. 61, lines 64-67,

the "...and the two pieces of position information...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

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the "...as an entry that corresponds to the segment name..." is taught by Miike at col. 39, lines 3-6, col. 46, lines 34-42, col. 68, lines 32-39, and col. 61, lines 64-67,

the "...two pieces of position information..." is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

and the "...indicating a storage position of the segment..." is taught by Miike at col. 19, lines 32-40, col. 21, lines 39-52, and col. 68, lines 32-39.

7. As per claims 36 and 40, the "...a position information storage unit..." is taught by Miike at col. 21, lines 39-52,

the "...position obtaining step for..." is taught by Miike at col. 13, lines 15-18,

the "...if the segment judging unit judges..." is taught by Miike at col. 13, lines 15-28,

the "...that the two time codes are continuous..." is taught by Hisatomi at col. 20, lines 49-50 and col. 8, lines 54-61,

the "...obtaining storage positions..." is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

the "...of the two pieces of video data from the file storage unit..." is taught by Miike at col. 22, lines 17-19, col. 54, lines 54-57, and col. 21, lines 39-52,

the "...and a position information write step for..." is taught by Miike at col. 21, lines 39-52 and col. 36, lines 61-65,

the "...recognizing the two pieces of video data as the segment..." is taught by Miike at col. 61, lines 55-63, col. 22, lines 17-19, col. 42, lines 54-57, and col. 68, lines 32-39,

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the "...generating a segment name...", is taught by Miike at col. 48, lines 54-58, col. 68, lines 32-39, and col. 61, lines 64-67,

the "...for identifying the recognized segment...", is taught by Miike at col. 13, lines 62-66, col. 61, lines 55-63, and col. 68, lines 32-39,

the "...and writing into the position information storage unit...", is taught by Miike at col. 36, lines 61-65 and col. 21, lines 39-52,

the "...segment name...", is taught by Miike at col. 68, lines 32-39 and col. 61, lines 64-67,

the "...and the two pieces of position information...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

the "...as an entry that corresponds to the segment name...", is taught by Miike at col. 39, lines 3-6, col. 46, lines 34-42, col. 68, lines 32-39, and col. 61, lines 64-67,

the "...two pieces of position information...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

and the "...indicating storage positions of the segment...", is taught by Miike at col. 19, lines 32-40, col. 21, lines 39-52, and col. 68, lines 32-39.

8. Claims 33, 34, 37, 38, 41, and 42 rejected under 35 U.S.C. 103(a) as being unpatentable over Miike and Hisatomi as applied to the claim above, and further in view of Slattery et al. (U.S. Patent No. 6,064,676).

As per claim 33, the "...if the segment judging unit judges...", is taught by Miike at col. 13, lines 15-28,

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the "...that the two pieces of numerical information...", is taught by Miike at col.

22, lines 17-19, col. 64, lines 43-52,

the "...segment generating unit generates a segment...", is taught by Miike at col.

48, lines 54-58 and col. 68, lines 32-39,

the "...that contains one of the read two pieces of data...", is taught by Miike at

col. 38, lines 15-18 and col. 22, lines 17-19,

the "...and generates another segment...", is taught by Miike at col. 48, lines 54-

58 and col. 68, lines 32-39,

and the "...that contains the other of the read two pieces of data...", is taught by

Miike at col. 38, lines 15-18 and col. 22, lines 17-19,

but the are not continuous...", is not taught by either Miike or Hisatomi.

However, Slattery teaches the processing of non-continuous data as follows:

"...In such a case, the descriptors in the transmit queue will have actual transmit times corresponding to a non-continuous sequence of transport packet time slots of the outputted remultiplexed TS..." at col. 41, lines 59-63.

It would have been obvious to one of ordinary skill at the time of the invention to combine Slattery with Miike and Hisatomi to process non-continuous data in order to process a sequence of video segments whenever the order of the segments is scrambled by transmission between systems. Miike, Hisatomi, and Slattery Hisatomi teach related applications. They teach the use of computers, the use of memory, the use of files, the storing of data, and the use of video and and Slattery teach the use of packets and the use of time codes.. Miike provides file storage units, position information, the storage of segments,

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segment names, and video images, Histomi provides time codes, and Slattery provides processing of non-continuous data.

9. As per claim 34, the "...if the segment judging unit judges...", is taught by Miike at col. 13, lines 15-28, the "...that the two pieces of numerical information...", is taught by Miike at col. 22, lines 17-19, col. 64, lines 43-52, the "...are not continuous...", is taught by Slattery at col. 41, lines 59-63, the "...position obtaining unit obtains two pieces of position information respectively...", is taught by Miike at col. 13, lines 15-18, the "...of the two pieces of data from the file storage unit...", is taught by Miike col. 22, lines 17-19 and col. 21, lines 53-56, the "...and the position information write unit...", is taught by Miike at col. 21, lines 39-52 and col. 36, lines 61-65, the "...recognizing the two pieces of data as two different segments...", is taught by Miike at col. 22, lines 17-19, col. 25, lines 44-49, and col. 68, lines 32-39, the "...generates two segment names...", is taught by Miike at col. 48, lines 54-58, col. 68, lines 32-39, and col. 61, lines 64-67, the "...for identifying the two segments...", is taught by Miike at col. 13, lines 62-66, col. 61, lines 55-63, and col. 68, lines 32-39, the "...and writes into the position information storage unit...", is taught by Miike at col. 36, lines 61-65 and col. 21, lines 39-52, the "...two segment names...", is taught by Miike at col. 68, lines 32-39 and col. 61, lines 64-67,

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the "...and the two pieces of position information..." is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

the "...as entries that respectively correspond to the two segment names..." is taught by Miike at col. 39, lines 3-6, col. 46, lines 34-42, col. 68, lines 32-39, and col. 61, lines 64-67,

the "...two pieces of position information..." is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

and the "...indicating storage positions of the two segments, respectively..." is taught by Miike at col. 19, lines 32-40, col. 21, lines 39-52, and col. 68, lines 32-39.

10. As per claims 37 and 41, the "...if the segment judging step judges..." is taught by Miike at col. 13, lines 15-28, the "...that the two time codes..." is taught by Hisatomi at col. 24, lines 20-22 and col. 20, lines 49-54, the "...are not continuous..." is taught by Slattery at col. 41, lines 59-63, the "...segment generating unit generates a segment..." is taught by Miike at col. 48, lines 54-58 and col. 68, lines 32-39, the "...that contains one of the read two pieces of video data..." is taught by Miike at col. 38, lines 15-18 and col. 22, lines 17-19, the "...and generates another segment..." is taught by Miike at col. 48, lines 54-58, col. 68, lines 32-39, and col. 42, lines 54-57,

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and the "...that contains the other of the read two pieces of video data...", is taught by Miike at col. 38, lines 15-18, col. 22, lines 17-19, and col. 42, lines 54-57.

11. As per claims 38 and 42 the "...if the segment judging step judges...", is taught by Miike at col. 13, lines 15-28, the "...that the two time codes...", is taught by Hisatomi at col. 24, lines 20-22 and col. 20, lines 49-54, are not continuous...", is taught by Slattery at col. 41, lines 59-63, the "...position obtaining step obtains storage positions...", is taught by Miike at col. 13, lines 15-18, the "...of the two pieces of video data from the file storage unit...", is taught by Miike col. 22, lines 17-19, col. 42, lines 54-57, and col. 21, lines 53-56, the "...and the position information write step...", is taught by Miike at col. 21, lines 39-52 and col. 36, lines 61-65, the "...recognizing the two pieces of video data as two different segments...", is taught by Miike at col. 22, lines 17-19, col. 42, lines 54-57, col. 25, lines 44-49, and col. 68, lines 32-39, the "...generates two segment names...", is taught by Miike at col. 48, lines 54-58, col. 68, lines 32-39, and col. 61, lines 64-67, the "...for identifying the two segments...", is taught by Miike at col. 13, lines 62-66, col. 61, lines 55-63, and col. 68, lines 32-39, the "...and writes into the position information storage unit...", is taught by Miike at col. 36, lines 61-65 and col. 21, lines 39-52,

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the "...two segment names...", is taught by Miike at col. 68, lines 32-39 and col. 61, lines 64-67,

the "...and the two pieces of position information...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

the "...as entries that respectively correspond to the two segment names...", is taught by Miike at col. 39, lines 3-6, col. 46, lines 34-42, col. 68, lines 32-39, and col. 61, lines 64-67,

the "...two pieces of position information...", is taught by Miike at col. 22, lines 17-19 and col. 21, lines 39-52,

and the "...indicating storage positions of the two segments, respectively...", is taught by Miike at col. 19, lines 32-40, col. 21, lines 39-52, and col. 68, lines 32-39.

12. Claims 1, 2, 6-9, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miike and Hisatomi as applied to claim 32 above, and further in view of Furegati et al. (U.S. Patent No. 5,966,704).

As per claim 1, the "...specifying a segment name...", is taught by Miike at col. 21, lines 66-67. col. 22, lines 1-3, and col. 68, lines 32-39, the "...position information read unit operable to read from the position information storage unit...", is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18, the "...piece of position information...", is taught by Miike at col. 21, lines 39-52, the "...corresponding to the segment name...", is taught by Miike at col. 46, lines 34-42, col. 68, lines 32-39, and col. 61, lines 64-67,

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the "...in the file storage unit...", is taught by Miike at col. 21, lines 53-56,
the "...by referring to the read piece of position information...", is taught by Miike
at col. col. 38, lines 15-18 and col. 21, lines 39-52,
but the "...an access request receiving unit operable to receive a segment access
request...",
the "...specified in the segment access request...",
and the "...and a segment access unit operable to access a segment...", are not
taught by either Miike or Hisatomi.

However, Furegati teaches the use of segment access requests as
follows:

"...The database management system (DBMS) or file system
used for the implementation of a particular storage segment
may have facilities for handling different access requests
from different applications to various data items of the
same storage segment in parallel access paths (threads) at
the same time..." at col. 13, line 4-9.

It would have been obvious to one of ordinary skill at the time of the
invention to combine Furegati with Miike and Hisatomi to receive segment
access requests in order to use standard search technology and obtain better
acceptance of the system. Miike, Hisatomi, and Furegati teach similar
applications. They teach the use of computers, the use of memory, the use of
files, the use of segments, the storing of data, the searching for data, and the use
of video. Miike provides file storage units, position information, the storage of
segments, segment names, and video images, Histomi provides time codes, and
Furegati provides segment access requests.

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13. As per claim 2, the "...wherein the piece of numerical information contained in each piece of data...", is taught by Miike at col. 64, lines 48-52 and col. 22, lines 17-19,
the "...stored in the file storage unit is a timecode...", is taught by Miike at col. 21, lines 53-56 and col. 13, lines 55-61,
the "...file management apparatus further comprising...", is taught by Furegati at col. 5, lines 55-59,
the "...an access request receiving unit operable to receive a segment access request...", is taught by Furegati at col. 13, lines 4-9,
the "...specifying a segment name...", is taught by Miike at col. 21, lines 66-67. col. 22, lines 1-3, and col. 68, lines 32-39,
the "...position information read unit operable to read from the position information storage unit...", is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18,
the "...piece of position information...", is taught by Miike at col. 21, lines 39-52,
the "...corresponding to the segment name...", is taught by Miike at col. 46, lines 34-42, col. 68, lines 32-39, and col. 61, lines 64-67,
the "...specified in the segment access request...", is taught by Furegati at col. 13, lines 4-9,
the "...and a segment access unit operable to access a segment...", is taught by Furegati at col. 13, lines 4-9,
the "...in the file storage unit...", is taught by Miike at col. 21, lines 53-56,

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and the "...by referring to the read piece of position information...", is taught by Miike at col. 38, lines 15-18 and col. 21, lines 39-52.

are not taught by Miike.

14. As per claim 6, the "...wherein the piece of numerical information contained in each piece of data...", is taught by Miike at col. 22, lines 17-19 and col. 64, lines 48-52,
the "...stored in the file storage unit is a timecode...", is taught by Miike at col. 21, lines 53-56 and col. 13, lines 55-61,
the "...and the file storage unit further stores...", is taught by Miike at col. 13, lines 55-61,
the "...as an entry that corresponds to a file name of the file...", is taught by Miike at col. 36, lines 42-47,
the "...position information that indicates a storage position of the file in the file storage unit...", is taught by Miike at col. 21, lines 39-52 and col. 21, lines 53-56,
the "...file management apparatus further comprising...", is taught by Furegati at col. 5, lines 55-59,
the "...an access request receiving unit operable to receive an access request...", is taught by Furegati at col. 13, lines 4-9,
the "...specifying an access target name...", is taught by Miike at col. 12, lines 29-46 and col. 6, lines 64-67,
the "...which is either a segment name or a file name...", is taught by Miike at col. 68, lines 32-39, col. 6, lines 64-67, and col. 36, lines 42-47,

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the "...judgement unit operable to judge whether the access target name..." is taught by Miike at col. 68, lines 32-39, col. 68, lines 32-39, and col. 6, lines 64-67,

the "...is a segment name or a file name..." is taught by Miike at col. 68, lines 32-39, col. 6, lines 64-67, and col. 36, lines 42-47,

the "...position information read unit operable to read..." is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18,

the "...from either the first position information storage unit..." is taught by Miike at col. 21, lines 39-52,

the "...or the second position information storage unit..." is taught by Miike at col. 21, lines 39-52,

the "...piece of position information corresponding to the access target name..." is taught by Miike at col. 21, lines 39-52, col. 68, lines 32-39, and col. 6, lines 64-67,

the "...judged by the judgement unit..." is taught by Miike at col. 21, lines 53-56,

the "...and an access unit operable to access..." is taught by Miike at col. 11, lines 52-60,

the "...either a segment or a file stored in the file storage unit..." is taught by Miike col. 68, lines 32-39 and col. 21, lines 53-56,

and the "...by referring to the read piece of position information..." is taught by Miike at col. 38, lines 15-18 and col. 13, lines 15-18.

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15. As per claim 7, the "...the judgement unit judges that the access target name...", is taught by Miike at col. 21, lines 53-56, col. 12, lines 29-46, and col. 6, lines 64-67,
the "...is a segment name...", is taught by Miike at col. 68, lines 32-39, col. 6, lines 64-67,
the "...when the access target name includes a name of a file...", is taught by Miike at col. 12, lines 29-46, col. 6, lines 64-67, and col. 36, lines 42-47,
the "...stored in the file storage unit...", is taught by Miike at col. 21, lines 53-56, and the "...and a character sequence...", is taught by Miike at col. 51, lines 29-37 and col. 54, lines 26-29,
and the "...indicating a serial number of a segment in the file...", is taught by Furegati at col. 13, lines 19-24, col. 13, lines 47-49, and col. 6, lines 31-34.

16. As per claim 8, the "...a file obtaining unit operable to obtain files...", is taught by Miike at col. 11, lines 52-60,
the "...which each include a plurality of pieces of video data...", is taught by Miike at col. 15, lines 29-32,
the "...that have each been assigned a timecode...", is taught by Miike at col. 13, lines 55-61,
the "...and store the obtained files in a file storage unit...", is taught by Miike at col. 21, lines 53-56,
the "...segment access request receiving unit operable to receive a segment access request specifying a segment...", is taught by Furegati at col. 13, lines 4-9,

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a position information read unit operable to read, from the position information storage unit, a piece of position information...,” is taught by Miike at col. 13, lines 15-18 and col. 38, lines 15-18,

the “...corresponding to the segment specified in the segment access request...,” is taught by Furegati at col. 13, lines 4-9,

the “...and a segment access unit operable to access the segment in the file storage unit...,” is taught by Miike at col. 68, lines 32-39, col. 11, lines 52-60, and col. 21, lines 52-56,

and the “...by referring to the read piece of position information...,” is taught by Miike at col. 38, lines 15-18 and col. 13, lines 15-18.

17. As per claim 9, the “...file obtaining unit operable to obtain files...,” is taught by Miike at col. 11, lines 52-60,

the “...which each include a plurality of pieces of video data..., is taught by Miike at col. 15, lines 29-32,

the “...that have each been assigned a timecode...,” is taught by Miike at col. 13, lines 55-61,

the “...and store the obtained files in a file storage unit...,’ is taught by Miike at 21, lines 53-56,

the “...segment access request receiving unit operable to receive a segment access request specifying a segment...,” is taught by Furegati at col. 13, lines 4-9,

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the "...segment set access unit operable to access the segment set in the file storage unit...", is taught by Miike at col. 68, lines 32-39, col. 28, lines 43-48, col. 11, lines 52-60, and col. 21, lines 52-56, and the "...by referring to the piece of position information of the segment set...", is taught by Miike at col. 76, lines 50-56, col. 13, lines 15-18, col. 68, lines 32-39, col. 28, lines 43-48.

18. As per claim 16, the "...position information storage unit stores position information...", is taught by Miike at col. 21, lines 39-52, the "...that indicates a position of a free space storing no data...", is taught by Hisatomi at col. 8, lines 6-15 and col. 11, lines 53-60, the "...file management apparatus further comprising...", is taught by Feragati at col. 5, lines 55-59, the "...an add request receiving unit operable to receive a segment add request...", is taught by Furegati at col. 4, lines 8-15 and col. 5, lines 55-59, the "...which requests to add a new segment to a file...", is taught by Miike at col. 14, lines 27-31, col. 22, lines 53-55, col. 68, lines 32-39, and col. 21, lines 53-56, the "...segment obtaining unit operable to obtain a new segment...", is taught by Miike at col. 22, lines 53-58 and col. 68, lines 32-39, the "...position information read unit operable to read, from the position information storage unit...", is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18, the "...piece of free space position information...", is taught by Hisatomi at col. 11, lines 53-60 and col. 8, lines 6-15,

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the "...and a segment add unit operable to add the new segment...", is taught by Miike at col. 68, lines 22-39, col. 14, lines 27-31, and col. 22, lines 53-55, the "...to the file storage unit...", is taught by Miike at col. 21, lines 53-56, and the "...by referring to the read piece of free space position information...", is taught by Hisatomi at col. 16, lines 25-27, col. 11, lines 53-60, and col. 8, lines 6-15.

19. As per claim 17, the "...position information storage unit stores position information...", is taught by Miike at col. 13, lines 15-18, the "...that indicates a position of a free space storing no data...", is taught by Histomi at col. 11 lines 53-60 and col. 2, lines 10-22, the "...file management apparatus further comprising...", is taught by Furegati at col. 5, lines 55-59, the "...add request receiving unit operable to receive a segment set add request...", is taught by Furegati at col. 2, lines 62-66, col. 13, lines 4-9, col. 4, lines 43-45, and col. 8, lines 39-43, the "...specifying (1) an add destination file...", is taught by Miike at col. 14, lines 27-31, col. 15, lines 65-67, col. 16, lines 1-7, and col. 48, lines 35-38, and the "...and (2) a source file including a segment set...", is taught by Miike at col. 48, lines 35-38, col. 68, lines 32-39, and col. 28, lines 43-48, the "...which is to be added to the add destination file...", is taught by Miike at col. 14, lines 27-31, col. 15, lines 65-67, col. 16, lines 1-7, and col. 48, lines 35-38,

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the "...position information read unit operable to read, from the position information storage unit...", is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18,

the "...piece of free space position information indicating a position of a free space...", is taught by Histomi at col. 11, lines 53-60 and col. 2, lines 10-22,

the "...of the specified add destination file...", is taught by Miike at col. 14, lines 27-31, col. 15, lines 65-67, col. 16, lines 1-7, and col. 48, lines 35-38,

the "...segment set extract unit operable to extract all segments...", is taught by Miike at col. 68, lines 32-39, col. 23, lines 43-48, col. 13, lines 10-14, and col. 22, lines 47-52,

the "...included in the source file as a segment set...", is taught by Miike at col. 48, lines 35-38, col. 68, lines 32-39, and col. 28, lines 43-48,

the "...by referring to the pieces of segment position information stored in the position information storage unit...", is taught by Miike at col. 38, lines 15-18, col. 68, lines 32-39, and col. 21, lines 39-52,

the "...and a segment set add unit operable to add the extracted segment set...", is taught by Miike at col. 68, lines 32-39, col. 23, lines 43-48, and col. 13, lines 10-14,

the "...to the free space...", is taught by Histomi at col. 11, lines 53-60,

and the "...by referring to the read piece of free space position information...", by Histomi at col. 11, lines 41-49, col. 11, lines 53-60, and col. 2, lines 10-22.

20. As per claim 18, the "...position information storage unit stores position information...", is taught by Miike at col. 13, lines 15-18,

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the "...that indicates a position of a free space storing no data...", is taught by

Histomi at col. 11 lines 53-60 and col. 2, lines 10-22,

the "...file management apparatus further comprising...", is taught by Furegati at col. 5, lines 55-59,

the "...add request receiving unit operable to receive a file add request...", is taught by Furegati at col. 2, lines 62-66, col. 13, lines 4-9, col. 4, lines 43-45, col. 8, lines 39-43, and col. 9, lines 50-55,

the "...specifying (1) an add destination file...", is taught by Miike at col. 14, lines 27-31, col. 15, lines 65-67, col. 16, lines 1-7, and col. 48, lines 35-38,

the "...and (2) a source file...", is taught by Miike at col. 48, lines 35-38,

the "...which is to be added to the add destination file...", is taught by Miike at col. 14, lines 27-31, col. 15, lines 65-67, col. 16, lines 1-7, and col. 48, lines 35-38,

the "...position information read unit operable to read, from the position information storage unit...", is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18,

the "...piece of free space position information indicating a position of a free space...", is taught by Histomi at col. 11, lines 53-60 and col. 2, lines 10-22,

the "...of the specified add destination file...", is taught by Miike at col. 14, lines 27-31, col. 15, lines 65-67, col. 16, lines 1-7, and col. 48, lines 35-38,

the "...file add unit operable to add the source file...", is taught by Miike at col. 14, lines 27-31 and col. 48, lines 35-38,

the "...to the free space...", is taught by Histomi at col. 11, lines 53-60,

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and the "...by referring to the read piece of free space position information....," by Histomi at col. 11, lines 41-49, col. 11, lines 53-60, and col. 2, lines 10-22.

21. Claims 10, 14, 15, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miike, Hisatomi, and Slattery as applied to claim 32 above, and further in view of Furegati et al. (U.S. Patent No. 5,966,704).

As per claim 10, the "...specifying a segment set name..." is taught by Miike at col. 68, lines 32-39, col. 23, lines 43-48, and col. 61, lines 64-67, the "...each segment set being composed of all segments in a file..." is taught by Miike at col. 68, lines 32-39, col. 28, lines 43-48, col. 22, lines 47-52, and col. 21, lines 53-56, the "...and each segment set name..." is taught by Miike at col. 68, lines 32-39, col. 23, lines 43-48, and col. 61, lines 64-67, the "...including a name of the file..." is taught by Miike at col. 36, lines 42-47, the "...and a character sequence unique..." is taught by Miike at col. 51, line 29-37, col. 54, lines 26-29, and col. 59, lines 34-38, the "...to segment set names..." is taught by Miike at col. 68, lines 32-39, col. 23, lines 43-48, and col. 61, lines 64-67, the "...a position information read unit..." is taught by Miike at col. 21, lines 39-52 and col. 38, lines 15-18, the "...operable to identify a file..." is taught by Miike at col. 13, lines 62-66 and col. 36, lines 44-47, the "...to which a segment set..." is taught by Miike at col. 68, lines 32-39 and col. 28,

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lines 43-48,

the "...corresponding to the specified segment set name belongs..." is taught by Miike at col. 68, lines 32-39, col. 23, lines 43-48, and col. 61, lines 64-67,

the "...and read, from the position information storage unit..." is taught by Miike at col. col. 38, lines 15-18 and col. 21, lines 39-52,

the "...pieces of position information corresponding to all segments..." is taught by Miike at col. 22, lines 17-19, col. 21, lines 39-52, col. 22, lines 47-52, and col. 68, lines 32-39,

the "...belonging to the identified file..." is taught by Miike at col. 13, lines 62-66 and col. 36, lines 44-47,

the "...recognizing the read pieces of position information..." is taught by Miike at col. 38, lines 15-18, col. 22, lines 17-19, and col. 21, lines 39-52,

the "...as a piece of position information of the segment set..." is taught by Miike at col. 22, lines 17-19, col. 21, lines 39-52, col. 68, lines 32-39, and col. 28, lines 43-48,

the "...In the file storage unit..." is taught by Miike at col. 24, lines 53-56,

and the "...by referring to the piece of position information of the segment set..." is taught by Miike at col. 22, lines 17-19, col. 21, lines 39-52, col. 68, lines 32-39, and col. 28, lines 43-48,

but the "...access request receiving unit operable to receive a segment set access request..."

and the "...and a segment set access unit operable to access the segment set..." are not taught by either Miike, Hisatomi, or Slattery.

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However, Furegati teaches the use of segment access requests as follows:

"...The database management system (DBMS) or file system used for the implementation of a particular storage segment may have facilities for handling different access requests from different applications to various data items of the same storage segment in parallel access paths (threads) at the same time..." at col. 13, line 4-9.

It would have been obvious to one of ordinary skill at the time of the invention to combine Furegati with Miike, Hisatomi, and Slattery to receive segment access requests in order to use standard search technology and obtain better acceptance of the system. Miike, Hisatomi, Slattery, and Furegati teach similar applications. They teach the use of computers, the use of memory, the use of files, the storing of data, and the use of video and Miike, Hisatomi, and Furegati teach the use of segments and the searching for data, Miike provides file storage units, position information, the storage of segments, segment names, and video images, Histomi provides time codes, Slattery provides processing of non-continuous data, and Furegati provides segment access requests.

22. As per claim 14, the "...an access request receiving unit operable to receive an access request...", is taught by Furegati at col. 13, lines 4-9, the "...specifying an access target name...", is taught by Miike at col. 21, lines 66-67. col. 22, lines 1-3, and col. 68, lines 32-39, the "...judgement unit operable to judge whether the access target name...", is taught by Miike at col. 68, lines 32-39, col. 68, lines 32-39, and col. 6, lines 64-67,

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the "...is a segment set name or a file name..." is taught by Miike at col. 68, lines 32-39, col. 28, lines 43-48, col. 6, lines 64-67, and col. 36, lines 42-47,

the "...each segment set being a set of all segments included in one file..." is taught by Miike at col. 68, lines 32-39, col. 28, lines 43-48, col. 22, lines 47-52, and col. 21, lines 53-56,

the "...position information read unit operable to read..." is taught by Miike at col. 38, lines 15-18 and col. 22, lines 4-11,

the "...from either the file storage unit or the position information storage unit..." is taught by Miike at col. 21, lines 53-56 and col. 21, lines 39-52,

the "...a piece of position information corresponding to the access target name..." is taught by Miike at col. 21, lines 39-52, col. 21, lines 66-67, col. 22, lines 1-3, and col. 68, lines 32-39,

the "...judged by the judgement unit..." is taught by Miike at col. 22, lines 17-19,

the "...and an access unit operable to access..." is taught by Miike at col. 11, lines 52-60,

the "...either a segment set or a file..." is taught by Miike at col. 68, lines 32-35, col. 28, lines 43-48, and col. 36, lines 42-27,

the "...stored in the file storage unit..." is taught by Miike at col. 21, lines 53-56,

and the "...by referring to the read piece of position information..." is taught by Miike at col. 38, lines 15-18 and col. 21, lines 39-52,

23. As per claim 15, the "...the judgment unit judges..." is taught by Miike at col. 68, lines 32-39,

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the "...that the access target name...", is taught by Miike at col. 21, lines 66-67.
col. 22, lines 1-3, and col. 68, lines 32-39,
the "...is a segment set name...", is taught by Miike at col. 68, lines 32-39, col. 28,
lines 43-48, and col. 6, lines 64-67,
the "...when the access target name...", is taught by Miike at col. 21, lines 66-67.
col. 22, lines 1-3, and col. 68, lines 32-39,
the "...includes a name of a file stored in the file storage unit...", is taught by Miike
at col. 36, lines 42-27 and col. 21, lines 53-56,
and the "...and a character sequence unique...", is taught by Miike at col. 51, line
29-37, col. 54, lines 26-29, and col. 59, lines 34-38,
and the "...to segment set names...", is taught by Miike at col. 68, lines 32-39, col.
23, lines 43-48, and col. 61, lines 64-67.

24. As per claim 19, the "...access request receiving unit operable to
receive a segment partial set access request...", is taught by Furegati at col. 13,
lines 4-9, col. 4, lines 8-15, and col. 3, lines 43-45,
the "...specifying a file name and a condition...", is taught by Miike at col. 36, lines
42-47 and col. 48, lines 12-17,
the "...each segment partial set being a set of one or more segments in one
file...", is taught by Furegati at col. 8, lines 38-42, col. 4, lines 8-15, col. 3, lines
43-45, and col. 10, lines 7-10,
the "...a position information read unit operable to read..." is taught by Miike at
col. 38, lines 15-18 and col. 22, lines 4-11,

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the "...from the position information storage unit...", is taught by Miike at col. 21, lines 39-52,

the "...pieces of position information corresponding to all segments...", is taught by Miike at col. 22, lines 17-19, col. 21, lines 39-52, col. 22, lines 47-52, and col. 68, lines 32-39,

the "...belonging to the specified file and satisfying the specified condition...", is taught by Miike at col. 36, lines 42-47 and col. 48, lines 12-17,

the "...recognizing the read pieces of position information as a piece of position information...", is taught by Miike at col. 36, lines 42-47 and col. 48, lines 12-17,

the "...of the requested segment partial set...", is taught by Furegati at col. 13, lines 4-9, col. 4, lines 8-15, and col. 3, lines 43-45,

the "...and a segment partial set access unit operable to access the segment partial set...", is taught by Furegati at col. 13, lines 4-9, col. 4, lines 8-15, and col. 3, lines 43-45,

the "...by referring to the piece of position information...", is taught by Miike at col. 22, lines 17-19 and col. Col. 21, lines 39-52,

and the "...of the segment partial set....", is taught by Furegati at col. 13, lines 4-9, col. 4, lines 8-15, and col. 3, lines 43-45.

25. As per claim 20, the "...each piece of data includes a piece of video data...", is taught by Miike at col. 22, lines 17-19 and col. 15, lines 29-32, the "...to which a timecode has been assigned...", is taught by Miike at col. 13, lines 55-61,

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the "...and the segment judging unit judges...", is taught by Miike at col. 21, lines 53-56,

and the "...whether two timecodes assigned to two pieces of video data are continuous...", is taught by Miike at col. 13, lines 55-61, col. 22, lines 17-19, col. 15, lines 29-32, and col. 16, lines 21-28.

26. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miike, Hisatomi, and Furegati as applied to the claims above, and further in view of Rusterholz et al. (U.S. Patent No. 4,873,630).

As per claim 3, the "...each piece of segment position information...", is taught by Miike at col. 68, lines 32-39 and col. 21, lines 39-52, the "...includes (1) an address indicating a file start storage position of a file...", is taught by Miike at col. 33, lines 43-48, the "...to which the segment belongs...", is taught by Miike at col. 40, lines 31-32, the "...indicating a size of a portion...", is taught by Miike at col. 40, lines 13-39 and col. 42, lines 19-20, the "...indicating a size of a portion...", is taught by Miike at col. 40, lines 13-39 and col. 42, lines 19-20, the "...and an end of the segment...", is taught by Miike at col. 58, lines 19-20, col. 68, lines 32-39, the "...indicating a size of a portion...", is taught by Miike at col. 40, lines 13-39 and col. 42, lines 19-20, the "...and (c) a size of the segment...", is taught by Miike at col. 40, lines 13-39 and col. 68, lines 32-39,

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but the "...and either (2-1) (a) an address offset...,"

the "...between the file start and a start of the segment...,"

the "...and (b) an address offset...,"

the "...between the file start

the "...or (2-2) (a) an address offset

the "...between the file start and a start of the segment...," are not taught by either Miike, Hisatomi, or Furegati.

However, Rusterholz teaches the use of address offsets, the start of files, and the start of segments as follows:

"...FIG. 43 illustrates the distribution of addressing information and offset information for jump instructions..." at col. 74, lines 3-4.

"...Next, the CVLP comes from the file address as does the RLMZ on an ALT 2 transfer..." at col. 135, lines 67-68 and col. 136, line 1.

"...The upper 18 bits are called the Segment Address..." at col. 64, lines 47-48.

It would have been obvious to one of ordinary skill at the time of the invention to combine Rusterholz with Miike, Hisatomi, and Furegati to use offsets, file addresses, and segment address in order to control addressing of sequential entities in memory and provide greater flexibility in retrieving sequential entities from memory. Miike, Hisatomi, Furegati, and Rusterholz teach the use of related applications. They teach the use of computers, the use of files, the use of segments, the storing of data, and the searching for data and Miike, Furegati, and Rusterholz teach the processing of requests. Miike provides file storage units, position information, the storage of segments, segment names,

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and video images, Histomi provides time codes, Furegati provides segment access requests, and Rusterholz provides offsets, file addresses, and segment address.

27. As per claim 4, the "...a receiving unit operable to receive a segment name obtainment request..." is taught by Rusterholz at col. 46, lines 39-44, col. 39, lines 35-39, and col. 256, lines 9-10, the "...and a segment name output unit operable to..." is taught by Rusterholz at col. 39, lines 35-39 and col. 174, lines 23-25, the "...after the receiving unit receives the segment name obtainment request..." is taught by Rusterholz at col. 46, lines 39-44, col. 39, lines 35-39, and col. 256, lines 9-10, the "...refer to the position information storage unit..." is taught by Miike at col. 33, lines 43-48, the "...and output to outside the file management apparatus..." is taught by Rusterholz at col. 174, lines 23-25 and col. 171, lines 25-27, the "...a list of segment names..." is taught by Rusterholz at col. 91, lines 56-58 and col. 39, lines 35-39, the "...which each include at least (1) a file name of a file..." is taught by Miike at col. 36, lines 42-47, the "...to which the segment belongs..." is taught by Miike at col. 68, lines 32-35, the "...and (2) a character sequence..." is taught by Rusterholz at col. 36, line 63, the "...which indicates a position of the segment..." is taught by Miike at col. 33, lines 43-48 and col. 68, lines 32-39,

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and the "...in one or more segments belonging to the file...", is taught by

Rusterholz at col. 40, lines 31-32.

28. As per claim 5, the "...the position information storage unit...", is taught by Miike at col. 33, lines 43-48, the "...stores a table showing relationships...", is taught by Furegati at col. 7, lines 49-52, col. 1, lines 65-67, and col. 2, line 1, the "...between (1) file names of files to which the segments belong...", is taught by Miike at col. 36, lines 42-4, col. 68, lines 32-39, the "... (2) serial numbers of the segments in the files...", is taught by Furegati at col. 13, lines 19-24, col. 13, lines 47-49, and col. 6, lines 31-34, the "...which are assigned in order of storage in the files...", is taught by Rusterholz at col. 230, lines 1-4 and col. 53, lines 7-9, the "...and (3) pieces of position information...", is taught by Miike at col. 13, lines 15-18, the "...and the position information read unit...", is taught by Miike at col. 13, lines 13-15 and col. 2, lines 7-11, the "...after receiving a segment name...", is taught by Rusterholz at col. 39, lines 35-39, the "...refers to the table to detect a piece of position information...", is taught by Miike at col. 36, lines 11-13 and col. 13, lines 15-18, the "...that corresponds to a file name...", is taught by Miike at col. 36, lines 42-47,

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the "...and a serial number of the segment...", is taught by Furegati at col. 13, lines 19-24, col. 13, lines 47-49, and col. 6, lines 31-34, the "...which are included in the segment name...", is taught by Rusterholz at col. 39, lines 35-39, and the "...and reads the detected piece of position information from the table...", is taught by Rusterholz at col. 54, lines 17-19, col. 137, lines 38-41, and col. 39, lines 35-39.

29. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miike, Hisatomi, Slattery, and Furegati as applied to the claims above, and further in view of Rusterholz et al. (U.S. Patent No. 4,873,630).

As per claim 11, the "...each piece of segment position information...", is taught by Miike at col. 68, lines 32-39 and col. 21, lines 39-52, the "...includes (1) an address indicating a file start storage position of a file...", is taught by Miike at col. 33, lines 43-48, the "...to which the segment belongs...", is taught by Miike at col. 40, lines 31-32, the "...indicating a size of a portion...", is taught by Miike at col. 40, lines 13-39 and col. 42, lines 19-20, the "...indicating a size of a portion...", is taught by Miike at col. 40, lines 13-39 and col. 42, lines 19-20, the "...and an end of the segment...", is taught by Miike at col. 58, lines 19-20, col. 68, lines 32-39, the "...indicating a size of a portion...", is taught by Miike at col. 40, lines 13-39 and col. 42, lines 19-20,

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the "...and (c) a size of the segment..." is taught by Miike at col. 40, lines 13-39

and col. 68, lines 32-39,

but the "...and either (2-1) (a) an address offset...",

the "...between the file start and a start of the segment...",

the "...and (b) an address offset...",

the "...between the file start...",

the "...or (2-2) (a) an address offset...",

and the "...between the file start and a start of the segment...", are not taught by either Miike, Hisatomi, Slattery, or Furegati.

However, Rusterholz teaches the use of address offsets, the start of files, and the start of segments as follows:

"...FIG. 43 illustrates the distribution of addressing information and offset information for jump instructions..." at col. 74, lines 3-4.

"...Next, the CVLP comes from the file address as does the RLMZ on an ALT 2 transfer..." at col. 135, lines 67-68 and col. 136, line 1.

"...The upper 18 bits are called the Segment Address..." at col. 64, lines 47-48.

It would have been obvious to one of ordinary skill at the time of the invention to combine Rusterholz with Miike, Hisatomi, Slattery, and Furegati to use offsets, file addresses, and segment address in order to control addressing of sequential entities in memory and provide greater flexibility in retrieving sequential entities from memory. Miike, Hisatomi, Slattery, Furegati, and Rusterholz teach the use of related applications. They teach the use of computers, the use of files, the storing of data, and the searching for data, Miike,

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Hisatomi, Furegati, and Rusterholz teach the use of segments, and the searching for data, and Miike, Furegati, and Rusterholz teach the processing of requests. Miike provides file storage units, position information, the storage of segments, segment names, and video images, Histomi provides time codes, Slattery provides processing of non-continuous data, Furegati provides segment access requests, and Rusterholz provides offsets, file addresses, and segment address.

30. As per claim 12, the "...a receiving unit operable to receive a segment set name obtainment request..." is taught by Rusterholz at col. 46, lines 39-44, col. 201, lines 41-42, col. 23, lines 43-48, and col. 256, lines 9-10, the "and a segment set name output unit operable to..." is taught by Rusterholz at col. 39, lines 35-39, col. 201, lines 41-42, and col. 174, lines 23-25, the "...after the receiving unit receives the segment set name obtainment request..." is taught by Rusterholz at col. 46, lines 39-44, col. 39, lines 35-39, col. 201, lines 41-42, and col. 256, lines 9-10, the "...refer to the position information storage unit..." is taught by Miike at col. 33, lines 43-48, the "...and output to outside the file management apparatus..." is taught by Rusterholz at col. 174, lines 23-25 and col. 171, lines 25-27, the "...a list of segment set names..." is taught by Rusterholz at col. 91, lines 56-58, col. 39, lines 35-39, and col. 201, lines 41-42, the "...which each include (1) a file name of a file..." is taught by Miike at col. 36, lines 42-47,

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the "...to which the segment set belongs...", is taught by Miike at col. 68, lines 32-35 and 28, 43-48,

the "...and (2) a character sequence unique...", is taught by Miike at col. 51, lines 39-37, col. 54, lines 26-29, and col. 59, lines 34-36,

and the "...to segment set names...", is taught by Miike at col. 68, lines 32-39, col. 28, lines 43-48, and col. 61, lines 64-67.

31. As per claim 13, the "...each piece of data includes a piece of video data...", is taught by Miike at col. 22, lines 17-19 and col. 15, lines 29-32,

the "...to which a timecode has been assigned...", is taught by Miike at col. 13, lines 55-61,

the "...and the segment judging unit judges...", is taught by Miike at col. 68, lines 32-39 and col. 21, lines 53-56,

and the "...whether two timecodes assigned to two pieces of video data are continuous...", is taught by Miike at col. 13, lines 55-61, col. 22, lines 17-19, col. 15, lines 29-32, and col. 16, lines 21-28.

32. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miike et al. (U.S. Patent No. 5,787,414), Hisatomi et al. (U.S. Patent No. 6,546,192), and Rusterholz et al. (U.S. Patent No. 4,873,630).

33. Miike renders obvious independent claim 43 as follows:
"...groups the plurality of pieces of video data into video segments..." at col. 41, lines 53-56, col. 22, lines 17-19, col. 42, lines 54-57, and col. 68, lines 32-39.
"...of pieces of video data..." at col. 22, lines 17-19 and col. 42, lines 54-57.

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"...associates a unique segment name..." at col. 14, lines 33-38, col. 60, lines 35-40, and col. 61, lines 64-67.

"...with each video segment within the file..." at col. 42, lines 54-57, col. 68, lines 32-39, and col. 21, lines 53-56.

"...such that each segment name..." at col. 60, lines 35-40 and col. 61, lines 64-67.

"...can be used to read or replace the associated segment within the file..." at col. 38, lines 15-18, col. 47, lines 54-63, col. 14, lines 33-38, col. 61, lines 64-67, and col. 21, lines 53-56.

Miike does not teach the use of file management systems, the use of time codes, and the scanning of a file for discontinuities.

34. However, Hisatomi teaches the use of file management systems and the use of time codes as follows:

"...the file management system..." at col. 5, lines 37-45.

"...between time codes..." at col. 20, lines 59-54.

"...the file management system..." at col. 5, lines 37-45.

It would have been obvious to one of ordinary skill at the time of the invention to combine Hisatomi with Miike to use of file management system in order to provide system level file management and make the system more user friendly. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Hisatomi with Miike to use time codes in order to designate the sequence of video segments in time order and reestablish this time order whenever the order of the segments is scrambled by transmission between

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systems. Miike and Hisatomi teach related applications. They teach the use of computers, the use of memory, the use of files, the use of segments, the storing of data, the searching for data, and the use of video. Miike provides files, segment names, and video images, and the reading and replacing of data and Histomi provides a system management system and time codes.

Hisatomi does not teach the scanning of the file for discontinuities.

35. However, Rusterholz teaches scanning of the file for discontinuities as follows:

"...by scanning the file for discontinuities..." at col. 224, lines 63-66 and col. 265, lines 4-8.

It would have been obvious to one of ordinary skill at the time of the invention to combine Rusterholz with Miike and Hisatomi to scan a file for discontinuities in order to detect whenever the sequence of video segments in time order has been scrambled by transmission between systems. Miike, Hisatomi, and Rusterholz teach the use of related applications. They teach the use of computers, the use of memories, the use of files, the use of segments, the storing of data, and the searching for data and Miike and Rusterholz teach the processing of requests. Miike provides files, segment names, and video images, and the reading and replacing of data, Histomi provides file management systems and time codes, and Rusterholz provides scanning of files for discontinuities.

36. As per claim 44, the "...file management system..." is taught by Hisatomi at col. 5, lines 37-45,

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the "...associates a file name with the video data file...", is taught by Miike at col. 14, lines 33-38, col. 21, lines 53-56, col. 60, lines 35-40, and col. 42, lines 54-57, the "...and each segment name comprises the file name of the video data file...", is taught by Miike at col. 61, lines 64-67, col. 60, lines 35-40, col. 21, lines 53-56, col. 42, lines 54-57, and the "...and a serial number...", is taught by Hisatomi at col. 5, lines 66-67 and col. 6, lines 1-2, "...unique to that segment within the data file...", is taught by Miike at col. 60, lines 35-40, col. 61, lines 64-67, and col. 21, lines 53-56.

37. As per claim 45, the "...file management system...", is taught by Hisatomi at col. 5, lines 37-45, the "...provides read and write access...", is taught by Rusterholz at col. 34, lines 53-55 and col. 40, lines 5-7, the "...to an individual video segment within the video data file...", is taught by Miike at col. 42, lines 54-57, col. 61, lines 64-67, and col. 21, lines 53-56, and the "...via the associated segment name...", is taught by Miike at col. 14, lines 33-38, col. 61, lines 64-67, and col. 60, lines 35-40.

Response to Arguments

38. Applicants' arguments filed 12 November 2004 have been fully considered but they are not persuasive. In the first argument for independent claims 31, 35, and 39 on page 19, paragraph 1, the Applicants state:

"The Office Action does not identify, and Miike does not describe, a single embodiment of a file management apparatus that satisfies any of the rejected claims. As Miike does not describe a file management apparatus as claimed,

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Miike does not anticipate any of the rejected claims. Moreover, without a teaching, suggestion, or motivation to combine the elements asserted to be found in Miike, Miike does not obviate the rejected claims."

The Examiner disagrees. In response to applicants' arguments, the recitation "a file management apparatus" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Under a 35 U.S.C. 102(e) rejection a motivation to combine the elements of a single reference is not required. The introduction of new material into these claims has dictated that a 35 U.S.C. 103(a) be used and a motivation is now provided for combining Miike with Hisatomi.

39. In the second argument for independent claims 31, 35, and 39 on page 19, paragraph 3 and page 20, paragraph 1, the Applicants state:

"The Office action asserts that Miike anticipates "...a file storage unit operable to store a file that contains two pieces of data..." In doing so, the Office Action relies of column 21, lines 53-56 and column 22, lines 17-19 of Miike. These two portion of Miike refer to the use of a document name and a document ID to identify a document file. It is unclear whether the Office Action intends the name and ID to be the two pieces of information contained in the file, or whether it simply relies on the citation as showing a file storage unit operable to store a file that contains two pieces of data. In subsequent paragraphs, additional citations to the same portions of Miike would seem to indicate that the name and ID are intended to be the claimed two pieces of data. However, the name and ID are not part of the document file. Moreover, having the two pieces of data comprise the name and ID would prevent Miike (to a greater extent than the other recitations already do) from satisfying the recitations of claim 31. It is also important to note that, as

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amended herein, claim 31 now recites that each piece of data is video data, and that the cited portions of Miike are silent as to the contents of the document file, and the name and ID are clearly not video data."

The Examiner disagrees. Miike teaches the use of two pieces of data at column 22, lines 17-19. Miike further teaches the use of "video images" at col. 42, lines 54-57, which clearly suggest the use of video data. Miike clearly suggests that by combining video data with the two pieces of data that one of the two pieces of data is video data.

40. In the third argument for independent claims 31, 35, and 39 on page 20, paragraph 2, the Applicants state:

"The Office Action goes on to rely on column 22, lines 17-19 (describing the first specific general embodiment of the first general embodiment) and column 64, lines 48-52 (describing the second general embodiment) of Miike to anticipate "...each piece of data containing a piece of numerical information..." As already discussed, column 22, lines 17-19 of Miike refers to the use of a document name and a document ID to identify a document file. Column 64, lines 48-52 discuss storing a numerical value associated with paper quality of a document along with the data of the document where the document comprises one or more images of a paper document. It is unclear how the Office Action views the cited portions of Miike as anticipating the quoted portions of claim 31. As best understood, the cited portions of Miike simply indicate that the system of Miike contemplates file storage, and association of a name, id, and paper quality with (although not necessarily part of) the file."

The Examiner disagrees. Miike teaches the use of "numerical values" at col. 64, lines 48-52. It is quite clear that "numerical values" qualify as "a piece of numerical information".

41. In the fourth argument for independent claims 31, 35, and 39 on page 20, paragraph 3, the Applicants state:

"Additionally, it is important to note that, as amended herein, claim 31 now requires that the numerical information found in each piece of the video data be a

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time code. In addition to none of the pieces of data being video data, none of the numeric information referred to in the cited portions of Miike is a time code.

The Examiner disagrees. Applicant's arguments with respect to claims 31, 35, and 39 have been considered but are moot in view of the new ground(s) of rejection. The 35 U.S.C. 102(e) rejection has been replaced by a 35 U.S.C.

103(a) rejection and Hisatomi has been combined with Miike. Miike teaches the use of video data at col. 42, lines 54-57 and Hisatomi teaches the use of time codes at col. 20, lines 49-50.

42. In the fifth argument for independent claims 31, 35, and 39 on page 20, paragraph 5 and page 21, paragraph 1, the Applicants state:

"The Office Action relies on column 68, lines 32-39 (describing the second general embodiment) and column 21, lines 53-56 (describing the first specific embodiment of the first general embodiment) as anticipating "...a segment judging unit operable, for each file stored in the file storage unit...". As already discussed, column 21, lines 53-59 of Miike refer to the use of a document name and a document ID to identify a document file. Column 68, lines 32-39 discuss extracting a drawing from a document image and judging whether the extracted drawing is a graph. Although judgment is discussed, there is no discussion in Mike regarding applicability to each file stored in the file storage unit."

The Examiner disagrees. These two elements taught by Miike when combined suggest that a judgment is taking place of some property or condition of the segments. Miike teaches the use of files and storage units at col. 1, lines 53-36.

43. In the sixth argument for independent claims 31, 35, and 39 on page 21, paragraph 2, the Applicants state:

"The Office Action goes on to rely on Column 38, lines 15-18 (describing the ninth specific embodiment of the first general embodiment) and column 22, lines 17-19 (describing the first specific embodiment of the first general embodiment) as anticipating "...to read the two pieces of data...". Once again, column 22, lines 17-19 of Mike refer to the use of a document name and a document ID to identify a document file. Column 38, lines 15-18 discuss identifying a party from speech

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data, or from a name that is part of an image. Neither discuss reading two pieces of data from a data file."

The Examiner disagrees. This is a restatement of the second argument.

Therefore, the response to the second argument is also valid for the sixth argument.

44. In the seventh argument for independent claims 31, 35, and 39 on page 21, paragraph 3, the Applicants state:

"The Office Action then relies on column 22, lines 17-19 (describing the first specific embodiment of the first general embodiment) and column 64, lines 48-52 (describing the second general embodiment) as anticipating "...extract two pieces of numerical information respectively...". Yet again, column 22, lines 17-19 of Miike refer to the use of a document name and a document ID to identify a document file, and column 64, lines 48-52 discuss storing a numerical value associated with paper quality of a document along with the data of the document where the document comprises one or more images of a paper document. Neither discusses extracting two pieces of numerical information from two pieces of data pulled from a single file."

The Examiner disagrees. Miike teaches the use of two pieces of data at column 22, lines 17-19. Miike further teaches the use of extracting information at col. 11, lines 52-60 and the use of numerical values at col. 64, lines 48-52. Miike clearly suggests that by combining these three elements the extraction of two pieces of numerical information.

45. In the eighth argument for independent claims 31, 35, and 39 on page 21, paragraph 4, the Applicants state:

"The Office action then relies on Column 38, lines 15-18 (describing the ninth specific embodiment of the first general embodiment) and column 22, lines 17-19 (describing the first specific embodiment of the first general embodiment) as anticipating "...from the read two pieces of data...". Once again, column 22, lines 17-19 of Mike refer to the use of a document name and a document ID to identify a document file, and column 38, lines 15-18 discuss identifying a party from speech data, or from a name that is part of an image. Again, neither discusses

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extracting two pieces of numerical information from two pieces of data pulled from a single file."

The Examiner disagrees. This is essentially a restatement of the second and sixth arguments. Therefore, the response to the second argument is valid for the eighth argument.

46. In the ninth argument for independent claims 31, 35, and 39 on page 22, paragraph 1, the Applicants state:

"The Office Action then finishes its assertion that the "segment judging unit" portion of claim 31 is anticipated by relying on column 68, lines 32-39 (describing the second general embodiment), column 22, lines 17-19 (describing the first specific embodiment of the first general embodiment), column 64, lines 48-52 (describing the second general embodiment), and column 16, lines 21-28 (describing the first general embodiment) as anticipating "...and judge whether the two pieces of numerical information are continuous..." Column 68, lines 32-39 discuss extracting a drawing from a document image and judging whether the extracted drawing is a graph. Once again, column 22, lines 17-19 of Miike refer to the use of a document name and a document ID to identify a document file, and column 64, lines 48-52 discuss storing a numerical value associated with paper quality of a document along with the data of the document where the document comprises one or more images of a paper document. Column 16, lines 21-28 discuss use of an input device to obtain audio or video data, and corresponding position data."

The Examiner disagrees. Miike teaches the use of two pieces of data at column 22, lines 17-19. Next, Miike suggests that a judgment is taking place of some property or condition of the segments at col. 68, lines 32-39. Finally, Miike identifies the property or condition of the segments as continuous at col. 16, lines 21-28. When these three elements of Miike are combined they suggest the judging of whether these segments are continuous.

47. In the tenth argument for independent claims 31, 35, and 39 on page 22, paragraph 2, the Applicants state:

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"From the citations, Miike may be said to comprise a judgment unit for judging whether an extracted drawing image is a graph or not. However, this does not satisfy the recitations of claim 31 because it is not equivalent to reading two pieces of data from a file, extracting two pieces of numerical information from the two pieces of data, and judging whether the two pieces of numerical information are continuous."

The Examiner disagrees. This argument is a restatement of the combined second, third, and ninth arguments. For this reason, the combined responses to the second, third, and ninth arguments are clearly a valid response to the tenth argument.

48. In the eleventh argument for independent claims 31, 35, and 39 on page 22, paragraph 3, the Applicants state:

"Moreover, as amended herein, claim 31 requires that the numerical information be time codes, that the two pieces of data be video data, and that the time codes be continuous in time series."

The Examiner disagrees. Applicant's arguments with respect to claims 31, 35, and 39 have been considered but are moot in view of the new ground(s) of rejection. The 35 U.S.C. 102(e) rejection has been replaced by a 35 U.S.C. 103(a) rejection and Hisatomi has been combined with Miike. Hisatomi teaches the use of time codes at col. 20, lines 49-50. Miike teaches the condition of continuous data at col. 16, lines 21-28 and the use of time series data at col. 72, lines 59-61. When these two elements are combined Miike suggests the condition of being continuous in time series.

49. In the twelfth argument for independent claims 31, 35, and 39 on page 22, paragraph 4 and page 23, paragraph 1, the Applicants state:

"After attempting to deal with the "segment judging unit" recitation, the Office Action goes on to address the "segment generating unit" portion of claim 31. In

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doing so, the Office Action asserts that column 68, lines 32-39 (describing the second general embodiment), column 22, lines 17-19 (describing the first specific embodiment of the first general embodiment), column 64, lines 48-52 (describing the second general embodiment), and column 16, lines 21-28 (describing the first general embodiment) anticipate "...if the segment judging unit judges that the two pieces of numerical information are continuous...." However, as previously discussed, the cited portions of Miike do not discuss a segment judging unit that judges whether two pieces of numerical data are continuous, and in particular does not discuss a segment judging unit that judges whether time codes extracted from two pieces of video data are continuous.

The Examiner disagrees. The twelfth argument is combination of the tenth and eleventh arguments. All of the elements of the individual arguments in the twelfth argument have previously been argued in the second, third, ninth, and eleventh arguments. For this reason, the combination of the responses for the second, third, ninth, and eleventh arguments is valid for the twelfth argument.

50. In the thirteenth argument for independent claims 31, 35, and 39 on page 22, paragraph 4 and page 23, paragraph 1, the Applicants state:

"The Office Action also asserts that column 48, lines 54-58 (describing the twelfth specific embodiment of the first general embodiment) and column 68, lines 32-39 (describing the second general embodiment) satisfy "...to generate a segment...". Column 48, lines 54-58 discuss creating and modifying an access list where the access list is stored separately from the document. As previously discussed, column 68, lines 32-39 discuss extracting a drawing from a document image and judging whether the extracted drawing is a graph. Creating and modifying an access list may be considered "generating a segment" in the abstract, but does not satisfy the recitations claim 31 because it (a) should be conditional on a judging unit judging whether extracted pieces of data are continuous, and (b) should contain the read two pieces of data."

The Examiner disagrees. Most of this argument is a restatement of the twelfth argument. Miike teaches the generation of an element at col. 48, lines 54-58 and the use of segments at col. 69, lines 32-39. By combining these two elements Miike suggests the generation of a segment. The combination of the responses

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for the second, third, ninth, and eleventh arguments is valid for the remainder of the thirteenth argument.

51. In the fourteenth argument for claims 32, 36, and 40 on page 24, paragraph 3, the Applicants state:

"One thing to note about claim 32 is that the claim elaborates on the segment generating unit of claim 31. As such, to be consistent with the assertions made in regard to claim 31, the position information storage unit and position obtaining unit of claim 32 should be satisfied by the access information detection unit of Miike. This is not the case. The position information referred to in the cited portions of Miike are provided by the environmental analysis target data input unit."

The Examiner disagrees. Miike explicitly teaches a position information storage unit at col. 21, lines 39-52 and also teaches the use of GPS at col. 13, lines 15-18. A GPS is most certainly a position obtaining unit.

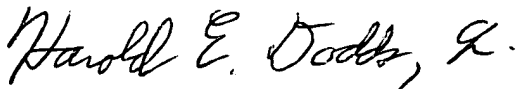
Conclusion

52. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

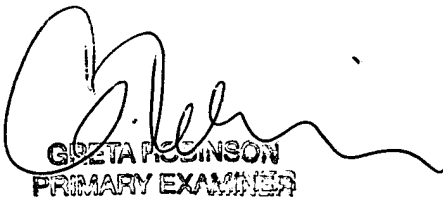
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571)-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Harold E. Dodds, Jr.
Patent Examiner
January 4, 2005



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